

**Reply Under 37 C.F.R. § 1.116 – Expedited Procedure**  
Serial No.: 09/472,534  
Examiner: Melanie Jagannathan

**REMARKS**

Claims 16 through 26 are currently pending. It is requested that the application be reconsidered and allowed in view of the following remarks.

The Office Action made a final rejection of claims 16 through 26 under 35 U.S.C. 102(b) as being unpatentable over U.S. Patent No. 5,479,608 to Richardson et al. (the “Richardson” reference). However, as stated in the previous response, the Richardson reference fails to disclose or suggest the requirements of the claims.

**Independent Claim 16 and Dependent Claims 17 through 22**

Independent claim 16 states, “receiving one or more working channels and at least one protection channel at an input interface to the transmission switch; performing a selection at the input interface between the working and protection channels in response to a signal quality of the working and protection channels; and switching the selected ones of the working and protection channels through one or more pre-determined matrix connections in a matrix in the transmission switch, wherein the pre-determined matrix connections are not disrupted due to the selection at the input interface between the working and protection channels.”

The present invention provides for switching at an input interface prior to a matrix such that “the pre-determined matrix connections are not disrupted due to the selection at the input interface between the working and protection channels.” As stated at page 7, lines 3 through 5, time consuming creation and deletion of matrix connections to accommodate a protection switch is avoided by the present invention.

The Richardson reference fails to disclose, *inter alia*, the requirement of claim 16 of, “switching the selected ones of the working and protection channels through one or more pre-determined matrix connections in a matrix in the transmission switch, wherein the pre-determined matrix connections are not disrupted due to the selection at the input interface between the working and protection channels.” For example, at column 10, lines 43 through 45, in response to a signal failure at M<sub>11</sub>, the Richardson reference states that, “If input head port B<sub>11</sub> has a valid signal,

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process 46 [of Figure 5a] is then performed by which IPU 16<sub>3</sub> in node B effects a third stage bridge (3SBR) in first/third stage 20<sub>3</sub>,” as seen in Figure 3b. In addition, the Richardson reference states at column 11, lines 6 through 11 that, “Upon receipt of the ‘good’ signal at protection input port PAI, in process 38 node A performs a first stage switch at first/third stage 20<sub>1</sub>, switching the facility now being received at protection input port PAI to center matrix stage 22A in place of the failed facility previously received at member input port MA1I.” Thus, the Richardson reference is clearly illustrating that matrix connections in the first stage of node 2A are switched and the matrix connections in third stage of node 2B are switched. The Office Action on page 4 seems to argue that since the signal is sent to both MA1I and PAI, there is no matrix switch. However, Figure 3c clearly indicates a switch in the first stage of node A from MA1I to PAI and this switch is described at column 11, lines 6 through 11 above. The Richardson reference clearly states that node A performs a first stage switch of the matrix. The Richardson reference thus fails to disclose or suggest the requirements of claim 16.

Independent Claim 23 and Dependent Claim 24

The Richardson reference fails to disclose the requirement, *inter alia*, of claim 23 of, “in response to a line failure, routing information on inbound working channel to outbound protection channel and routing information on inbound protection channel to outbound working channel at an input/output interface, wherein routing of the working and protection channels at the input/output interface prevents information from being provided to the matrix such that the matrix connections are not disrupted.” For example, at column 10, lines 43 through 45, in response to a signal failure at MA1I, the Richardson reference states that, “If input head port B1I has a valid signal, process 46 [of Figure 5a] is then performed by which IPU 16<sub>3</sub> in node B effects a third stage bridge (3SBR) in first/third stage 20<sub>3</sub>,” as seen in Figure 3b. In addition, the Richardson reference states at column 11, lines 6 through 11 that, “Upon receipt of the ‘good’ signal at protection input port PAI, in process 38 node A performs a first stage switch at first/third stage 20<sub>1</sub>, switching the facility now being received at protection input port PAI to center matrix stage 22A in place of the failed facility previously received at member input port

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MA11.” As explained above with specific citations from columns 10 and 11 and referring to Figures 3b-3e, the Richardson reference does not illustrate the requirements of the claim.

**Independent Claim 25 and dependent Claim 26**

The Richardson reference also fails to disclose the requirement, *inter alia*, of claim 25 of, “a switching matrix that switches the selected one of the inbound working and protection channels over a pre-determined matrix connection, wherein the pre-determined matrix connection is not disrupted in response to the selection of the inbound working and protection channel.” For example, at column 10, lines 43 through 45, in response to a signal failure at MA11, the Richardson reference states that, “If input head port B11 has a valid signal, process 46 [of Figure 5a] is then performed by which IPU 16<sub>3</sub> in node B effects a third stage bridge (3SBR) in first/third stage 20<sub>3</sub>,” as seen in Figure 3b. In addition, the Richardson reference states at column 11, lines 6 through 11 that, “Upon receipt of the ‘good’ signal at protection input port PAI, in process 38 node A performs a first stage switch at first/third stage 20<sub>1</sub>, switching the facility now being received at protection input port PAI to center matrix stage 22A in place of the failed facility previously received at member input port MA11.” As explained above with specific citations from columns 10 and 11, the Richardson reference does not illustrate the requirements of the claim.

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**CONCLUSION**

For the above reasons, claims 16 through 26 are patentable under 35 U.S.C. 102(b) over the Richardson reference. Therefore, it is respectfully requested that the rejection of the claims be withdrawn and full allowance granted. Should the Examiner have any further comments or suggestions, please contact Jessica Smith at (972) 477-9109.

Respectfully submitted,

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